**DIPLOMA IN COMPUTER SCIENCE AND ENGINEERING**

**&**

**CERTIFICATE IN DATA ENTRY & WORD PROCESSING (CDE)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester-I (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-111 | Mathematics- I | 4 | 1 | 0 | 5 | 5 |
| 2 | PH-111 | Physics-I | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-111 | Chemistry-I | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-111 | Communication Skills-I | 2 | 0 | 0 | 2 | 2 |
| 5 | CS-111 | Computer Fundamentals | 3 | 0 | 2 | 5 | 4 |
| 6 | CS-112 | Troubleshooting & Maintanence Lab | 0 | 0 | 4 | 4 | 2 |
| 7 | CS-113 | Internet Applications Lab | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **17** | **1** | **14** | **32** | **25** |
| **Semester-II (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-121 | Mathematics- II | 4 | 1 | 0 | 5 | 5 |
| 2 | PH-121 | Physics-II | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-121 | Chemistry-II | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-121 | Communication Skills-II | 1 | 0 | 2 | 3 | 2 |
| 5 | WS-122 | Workshop Practice | 0 | 0 | 4 | 4 | 2 |
| 6 | CS-122 | Operating System Fundamentals | 3 | 0 | 2 | 5 | 4 |
| 7 | ME-121 | Engineering Drawing | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **16** | **1** | **16** | **33** | **25** |
| **Semester-III A (ICD)** | | | | | | | |
|  | TP-201 | Two Weeks Practical Training during summer vacations |  |  |  | 80 |  |
| **Semester-III B (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | CS-211 | Internet & Web Technologies | 2 | 0 | 4 | 6 | 4 |
| 2 | EE-211 | Fundamental of Electrical Engineering | 3 | 0 | 2 | 5 | 4 |
| 3 | EC-211 | Fundamental of Electronics Engineering | 3 | 0 | 2 | 5 | 4 |
| 4 | CS-214 | Computer Programming | 3 | 0 | 4 | 7 | 5 |
| 5 | CS-215 | Data Structures | 3 | 0 | 4 | 7 | 5 |
| 6 | MC-211 | Moral values and Professional ethics | 1 | 0 | 0 | 1 | 0 |
|  |  | **Total** | **15** | **0** | **16** | **31** | **22** |
| **Semester-IV (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-221 | Applied Mathamatics | 3 | 1 | 0 | 4 | 4 |
| 2 | CS-221 | Object Oriented Programming | 2 | 0 | 4 | 6 | 4 |
| 3 | CS-222 | Network Operating System | 2 | 0 | 2 | 4 | 3 |
| 4 | CS-223 | Computer Architecture & Organisation | 3 | 0 | 0 | 3 | 3 |
| 5 | CS-224 | Computer Networks | 3 | 0 | 2 | 5 | 4 |
| 6 | CS-225 | System Installation and Maintainance | 2 | 0 | 4 | 6 | 4 |
| 7 | CS-226 | Desktop Publishing Lab | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **15** | **1** | **16** | **32** | **24** |
| **Semester-V A (ICD)** | | | | | | | |
|  | TP-301 | Four Weeks Industrial Training during summer vacations |  |  |  | 160 |  |
| **Semester-VB (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | MC-311 | Environmental Studies | 2 | 0 | 0 | 2 | 2 |
| 2 | HU-311 | Entreprenuership | 2 | 0 | 0 | 2 | 2 |
| 3 | CS-311 | Computer Graphics | 3 | 0 | 4 | 7 | 5 |
| 4 | CS-312 | Software Engineering | 3 | 0 | 2 | 5 | 4 |
| 5 | CS-313 | Database Management | 3 | 0 | 4 | 7 | 5 |
| 6 | CS-314 | System Analysis & Design | 2 | 1 | 0 | 3 | 3 |
| 7 | CS-315 | Visual Programming Lab | 0 | 0 | 4 | 4 | 2 |
| 8 | TP-301E | Industrial Training (Evaluation only) |  |  |  |  |  |
|  |  | **Total** | **15** | **1** | **14** | **30** | **23** |
| **Semester-VI (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | CS-321 | Java Programming | 3 | 0 | 4 | 7 | 5 |
| 2 | CS-322 | System Programming | 3 | 0 | 0 | 3 | 3 |
| 3 | CS-323 | Microprocessor | 3 | 0 | 4 | 7 | 5 |
| 4 | CS-324 | Multimedia & Animation Techniques | 2 | 0 | 4 | 6 | 4 |
| 5 | CS-325 | Project | 0 | 0 | 4 | 4 | 2 |
| 6 | CS-326 | Network Installation & Security | 3 | 0 | 2 | 5 | 4 |
|  |  | **Total** | **14** | **0** | **18** | **32** | **23** |

**DIPLOMA (ICD) IN CHEMICAL TECHNOLOGY**

**&**

**CERTIFIATE IN PAPER TECHNOLOGY**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester-I (ICD)** | | | | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | | | **Hrs.** | | **Credits** |
| 1 | AM-111 | Mathematics- I | 4 | 1 | 0 | | | 5 | | 5 |
| 2 | PH-111 | Physics-I | 4 | 0 | 2 | | | 6 | | 5 |
| 3 | CY-111 | Chemistry-I | 4 | 0 | 2 | | | 6 | | 5 |
| 4 | HU-111 | Communication Skills-I | 2 | 0 | 0 | | | 2 | | 2 |
| 5 | WS-112 | Workshop Practice | 0 | 0 | 4 | | | 4 | | 2 |
| 6 | ME-111 | Engineering Drawing | 0 | 0 | 4 | | | 4 | | 2 |
| 7 | CH-111 | Pulping & Bleaching Technology | 2 | 0 | 2 | | | 4 | | 3 |
|  |  | **Total** | **16** | **1** | **14** | | | **31** | | **24** |
| **Semester-II (ICD)** | | | | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | | | **Hrs.** | | **Credits** |
| 1 | AM-121 | Mathematics- II | 4 | 1 | 0 | | | 5 | | 5 |
| 2 | PH-121 | Physics-II | 4 | 0 | 2 | | | 6 | | 5 |
| 3 | CY-121 | Chemistry-II | 4 | 0 | 2 | | | 6 | | 5 |
| 4 | HU-121 | Communication Skills-II | 1 | 0 | 2 | | | 3 | | 2 |
| 5 | CH-121 | Unit Operation Lab | 0 | 0 | 4 | | | 4 | | 2 |
| 6 | CH-122 | Introduction of Paper Technology Lab | 0 | 0 | 4 | | | 4 | | 2 |
| 7 | CS-121 | Computer Fundamentals | 3 | 0 | 2 | | | 5 | | 4 |
|  |  | **Total** | **16** | **1** | **16** | | | **33** | | **25** |
| **Semester-III A (ICD)** | | | | | | | | | | |
|  | **TP-201** | **Two Weeks Practical Training during summer vacations** |  |  |  | **80** | | | **S/US** | |
| **Semester-III B (ICD)** | | | | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | | | **Hrs.** | | **Credits** |
| 1 | AM-211 | Applied Mathematics | 3 | 1 | 0 | | | 4 | | 4 |
| 2 | CH-211 | Fluid Flow | 3 | 1 | 0 | | | 4 | | 4 |
| 3 | CH-212 | Pulp Washing & Chemical Recovery | 3 | 1 | 4 | | | 8 | | 6 |
| 4 | CH-214 | Paper Testing & Quality Control Lab | 0 | 0 | 4 | | | 4 | | 2 |
| 5 | CH-215 | Chemical Engg. Thermodynamics | 3 | 2 | 0 | | | 5 | | 5 |
| 6 | CH-216 | Mechanical Operation | 3 | 1 | 0 | | | 4 | | 4 |
|  |  | **Total** | **15** | **6** | **8** | | | **29** | | **25** |
| **Semester-IV (ICD)** | | | | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | | | **Hrs.** | | **Credits** |
| 1 | CH-221 | Heat Transfer | 3 | 2 | 4 | | | 9 | | 7 |
| 2 | EE-221 | Fundamental of Electrical Engineering | 3 | 0 | 2 | | | 5 | | 4 |
| 3 | EC-221 | Fundamentals of Electronics Engineering | 3 | 0 | 2 | | | 5 | | 4 |
| 4 | CH-223 | Stock Preparation & Paper Making | 3 | 2 | 0 | | | 5 | | 5 |
| 5 | CH-225 | Paper Making Lab | 0 | 0 | 4 | | | 4 | | 2 |
| 6 | MC-221 | Moral values and Professional ethics | 1 | 0 | 0 | | | 1 | | 0 |
|  |  | **Total** | **13** | **4** | **12** | | | **29** | | **22** |
| **Semester-V A (ICD)** | | | | | | | | | | |
|  | **TP-301** | **Four Weeks Industrial Training during summer vacations** |  |  |  | **160** | | |  | |
| **Semester-V B (ICD)** | | | | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | | | **Credits** | |
| 1 | CH-311 | Process Instrumentation | 3 | 0 | 4 | 7 | | | 5 | |
| 2 | CH-312 | Mass Transfer | 3 | 1 | 0 | 4 | | | 4 | |
| 3 | CH-313 | Chemical Reaction Engineering | 3 | 2 | 4 | 9 | | | 7 | |
| 4 | CH-314 | Industrial Stoichiometry | 3 | 2 | 0 | 5 | | | 5 | |
| 5 | CH-315 | Alternate Energy Sources | 3 | 1 | 0 | 4 | | | 4 | |
| 5 | TP-301E | Industrial Training |  |  |  |  | | | S/US | |
|  |  | **Total** | **15** | **6** | **8** | **29** | | | **25** | |
| Semester-VI (ICD) | | | | | | | | | | |
| S.No | Sub Code | Subject Name | L | T | P | | Hrs. | | Credits | |
| 1 | HU-321 | Entrepreneurship | 2 | 0 | 0 | | 2 | | 2 | |
| 2 | MC-321 | Environmental Studies | 2 | 0 | 0 | | 2 | | 2 | |
| 3 | CH-321 | Chemical Process Industries | 3 | 2 | 0 | | 5 | | 5 | |
| 4 | CH-322 | Petroleum Technology | 3 | 1 | 4 | | 8 | | 6 | |
| 5 | CH-333 | Process Equipment Design | 1 | 1 | 4 | | 6 | | 4 | |
| 6 | CH-335 | Project | 0 | 0 | 4 | | 4 | | 2 | |
|  |  | **Total** | **11** | **4** | **12** | | **27** | | **21** | |

**DIPLOMA(ICD) IN CIVIL ENGINEERING**

**&**

**CERTIFICATE PROGRAMME IN BUILDING MAINTENANCE**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester-I (ICD)** | | | | | | | | | |
| **S.No** | **Sub. Code** | **Subject Name** | **L** | | | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-111 | Mathematics- I | 4 | | | 1 | 0 | 5 | 5 |
| 2 | PH -111 | Physics-I | 4 | | | 0 | 2 | 6 | 5 |
| 3 | CY-111 | Chemistry-I | 4 | | | 0 | 2 | 6 | 5 |
| 4 | HU-111 | Communication Skills-I | 2 | | | 0 | 0 | 2 | 2 |
| 5 | WS-111 | Workshop Practice-I | 0 | | | 0 | 4 | 4 | 2 |
| 6 | ME-111 | Engineering Drawing | 0 | | | 0 | 4 | 4 | 2 |
| 7 | CS-111 | Computer Fundamentals | 3 | | | 0 | 2 | 5 | 4 |
|  |  | **Total** | **17** | | | **1** | **14** | **32** | **25** |
| **Semester-II (ICD)** | | | | | | | | | |
| **S.No** | **Sub. Code** | **Subject Name** | **L** | | **T** | | **P** | **Hrs.** | **Credits** |
| 1 | AM-121 | Mathematics- II | 4 | | 1 | | 0 | 5 | 5 |
| 2 | PH-121 | Physics-II | 4 | | 0 | | 2 | 6 | 5 |
| 3 | CY-121 | Chemistry-II | 4 | | 0 | | 2 | 6 | 5 |
| 4 | HU-121 | Communication Skills-II | 1 | | 0 | | 2 | 3 | 2 |
| 5 | WS-121 | Workshop Practice-II | 0 | | 0 | | 4 | 4 | 2 |
| 6 | HU-122 | Principles of Management and Industrial Psychology | 3 | | 0 | | 0 | 3 | 3 |
| 7 | CV-121 | Building Materials | 2 | | 0 | | 2 | 4 | 3 |
|  |  | **Total** | **18** | | **1** | | **12** | **31** | **25** |
| **Semester –III A** | | | | | | | | | |
| 1 | TP-201 | Two Weeks Practical Training during Summer Vacation | | | | | | **80** | **S/US** |
| **Semester-III B(ICD)** | | | | | | | | | |
| **S.No** | **Sub. Code** | **Subject Name** | | **L** | | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-211 | Applied Mathematics | | 3 | | 1 | 0 | 4 | 4 |
| 2 | EE-211 | Fundamentals of Electrical Engineering | | 3 | | 0 | 2 | 5 | 4 |
| 3 | EC-211 | Fundamentals of Electronics Engineering | | 3 | | 0 | 2 | 5 | 4 |
| 4 | CV-211 | Surveying-I | | 2 | | 0 | 2 | 4 | 3 |
| 5 | CV-212 | Building Construction and Drawing | | 2 | | 0 | 2 | 4 | 3 |
| 6 | CV-213 | Concrete Technology | | 2 | | 0 | 2 | 4 | 3 |
| 7 | CV-214 | Water Supply and Waste Water Engineering | | 2 | | 0 | 2 | 4 | 3 |
|  |  | **Total** | | **17** | | **1** | **12** | **30** | **24** |
| **Semester-IV** | | | | | | | | | |
| **S.No** | **Sub. Code** | **Subject Name** | | **L** | | **T** | **P** | **Hrs.** | **Credits** |
| 1 | CV-221 | Surveying-II | | 2 | | 0 | 2 | 4 | 3 |
| 2 | CV-222 | Irrigation Engineering & Drawing | | 2 | | 0 | 4 | 6 | 4 |
| 3 | CV-223 | Highway Engineering | | 3 | | 0 | 2 | 5 | 4 |
| 4 | CV-224 | Quantity Surveying & Valuation | | 2 | | 0 | 0 | 2 | 2 |
| 5 | CV-225 | Structural Mechanics | | 3 | | 1 | 2 | 6 | 5 |
| 6 | CV-226 | Building Maintenance | | 2 | | 0 | 4 | 6 | 4 |
| 7 | MC-221 | Moral values and Professional Ethics | | 1 | | 0 | 0 | 1 | 0 |
|  |  | **Total** | | **15** | | **1** | **14** | **30** | **22** |
| **Semester-V A** | | | | | | | | | |
|  | TP-301 | Four Weeks Industrial Training/Surveying Camp during Summer Vacations | | | | | | **160** | **S/US** |
| **Semester-V B** | | | | | | | | | |
| **S.No** | **Sub. Code** | **Subject Name** | | **L** | | **T** | **P** | **Hrs.** | **Credits** |
| 1 | CV-311 | Construction Management and Accounts | | 3 | | 0 | 0 | 3 | 3 |
| 2 | CV-312 | Soil and Foundation Engineering | | 2 | | 1 | 4 | 7 | 5 |
| 3 | CV-313 | Fluid Mechanics | | 2 | | 0 | 4 | 6 | 4 |
| 4 | CV-314 | Railways, Bridges and Tunnel Engineering | | 2 | | 0 | 2 | 4 | 3 |
| 5 | CV-315 | CAD in Civil Engineering | | 2 | | 1 | 2 | 5 | 4 |
| 6 | CV-316 | Design and Drawing of RCC Structures | | 2 | | 0 | 4 | 6 | 4 |
| 7 | TP-301E | Industrial Training (Evaluation only--S/US) | |  | |  |  |  | S/US |
|  |  | **Total** | | **13** | | **2** | **16** | **31** | **23** |
| **Semester-VI** | | | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | | **L** | | **T** | **P** | **Hrs.** | **Credits** |
| 1 | HU-321 | Entrepreneurship | | 2 | | 0 | 0 | 2 | 2 |
| 2 | MC-321 | Environmental Studies | | 2 | | 0 | 0 | 2 | 2 |
| 3 | CV-321 | Architectural Practices and Interior Design | | 3 | | 0 | 4 | 7 | 5 |
| 4 | CV-322 | Design and Drawing of Steel Structures | | 4 | | 0 | 2 | 6 | 5 |
| 5 | CV-323 | Construction Machinery and Equipment | | 3 | | 1 | 0 | 4 | 4 |
| 6 | CV-324 | Earthquake Resistant Building Construction | | 3 | | 0 | 0 | 3 | 3 |
| 7 | CV-325 | Project | | 0 | | 0 | 4 | 4 | 2 |
|  |  | **Total** | | **17** | | **1** | **10** | **28** | **23** |

**DIPLOMA (ICD) IN ELECTRONICS AND COMMUNICATION ENGINEERING**

**&**

**CERTIFICATE PROGRAMME IN SERVICING & MAINTENANCE OF ELECTRONIC INSTRUMENTS(CSME)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester-I (ICD) (CSME)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1. | AM-111 | Mathematics- I | 4 | 1 | 0 | 5 | 5 |
| 2. | PH-111 | Physics-I | 4 | 0 | 2 | 6 | 5 |
| 3. | CY-111 | Chemistry-I | 4 | 0 | 2 | 6 | 5 |
| 4. | HU-111 | Communication Skills-I | 2 | 0 | 0 | 2 | 2 |
| 5. | EE-111 | Fundamental of Electrical Engineering | 3 | 0 | 2 | 5 | 4 |
| 6 | WS-112 | Workshop Practice | 0 | 0 | 4 | 4 | 2 |
| 7. | EC-112 | Electronic Devices | 2 | 0 | 2 | 4 | 3 |
|  |  | **Total** | **19** | **1** | **12** | **32** | **26** |
| **Semester-II (ICD) (CSME)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-121 | Mathematics- II | 4 | 1 | 0 | 5 | 5 |
| 2 | PH-121 | Physics-II | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-121 | Chemistry-II | 4 | 0 | 2 | 6 | 5 |
| 4 | ME-121 | Engineering Drawing | 0 | 0 | 4 | 4 | 2 |
| 5 | EC-121 | Digital Electronics | 3 | 0 | 4 | 7 | 5 |
| 6 | EC-122 | Electronics Workshop Practice-I | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **15** | **1** | **16** | **32** | **24** |
| **Semester-III A (ICD)** | | | | | | | |
|  | TP-201 | Two Weeks Practical Training during summer vacations |  |  |  | 80 | S/US |
| **Semester-III B (ICD) (CSME)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | HU-211 | Communication Skills-II | 1 | 0 | 2 | 3 | 2 |
| 2 | CS-216 | Computer Fundamentals | 3 | 0 | 2 | 5 | 4 |
| 3 | EC-213 | Electronics measurement & instrumentation | 3 | 1 | 2 | 6 | 5 |
| 4 | EC-214 | Analog Communication | 3 | 1 | 2 | 6 | 5 |
| 5 | EC-217 | Consumer Electronics | 3 | 1 | 0 | 4 | 4 |
| 6 | EC-218 | Troubleshooting of electronics equipments | 0 | 0 | 4 | 4 | 2 |
| 7 | MC-211 | Moral values and Professional ethics | 1 | 0 | 0 | 1 | 0 |
|  |  | **Total** | **14** | **3** | **12** | **29** | **22** |
| **Semester-IV (ICD) (CSME)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-221 | Applied Mathematics | 3 | 1 | 0 | 4 | 4 |
| 2 | EC-223 | Fundamentals of Microprocessor & Microcontroller | 3 | 1 | 4 | 8 | 6 |
| 3 | EC-226 | Computer Programming & application | 3 | 0 | 2 | 5 | 4 |
| 4 | EC-227 | Service & Maintenance of Computer | 2 | 0 | 4 | 6 | 4 |
| 5 | EC-228 | Network Theory | 3 | 1 | 0 | 4 | 4 |
| 6 | EC-229 | Troubleshooting of Electronic Components | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **14** | **3** | **14** | **31** | **24** |
| **Semester-V A (ICD)** | | | | | | | |
|  | TP301 | Four Weeks Industrial Training during summer vacations |  |  |  | 160 |  |
| **Semester-V B (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | MC-311 | Environmental Studies | 2 | 0 | 0 | 2 | 2 |
| 2 | HU-311 | Entrepreneurship | 2 | 0 | 0 | 2 | 2 |
| 3 | EC-311 | Field Theory | 3 | 0 | 0 | 3 | 3 |
| 4 | EC-312 | Linear IC's & Application | 3 | 1 | 4 | 8 | 6 |
| 5 | EC-313 | Industrial Electronics | 3 | 1 | 4 | 8 | 6 |
| 6 | EC-314 | Electronic Workshop Practice-II | 0 | 0 | 4 | 4 | 2 |
| 7 | EC-315 | Surface Mount Technology | 2 | 1 | 0 | 3 | 3 |
| 8 | TP-301E | Industrial Training |  |  |  |  | S/US |
|  |  | **Total** | **15** | **3** | **12** | **30** | **24** |
| **Semester-VI (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | EC-321 | Digital Communication | 3 | 1 | 2 | 6 | 5 |
| 2 | EC-322 | Wireless & Mobile Communication | 3 | 0 | 0 | 3 | 3 |
| 3 | EC-323 | Microprocessor & Microcontroller Applications | 3 | 1 | 2 | 6 | 5 |
| 4 | EC-324 | Microwave engineering | 3 | 0 | 0 | 3 | 3 |
| 5 | EC-325 | Microelectronics | 3 | 0 | 2 | 5 | 4 |
| 7 | EC-327 | Project | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **15** | **2** | **10** | **27** | **22** |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

**DIPLOMA (ICD) IN ELECTRONICS AND COMMUNICATION ENGINEERING**

**&**

**CERTIFICATE PROGRAMME IN TELEVISION MECHANIC (CTV)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | |  | | |  | |  | |  | |  | |  |
|  |  | |  | | |  | |  | |  | |  | |  |
| **Semester-I (ICD) (CTV)** | | | | | | | | | | | | | | | |
| **S.No** | | **Sub Code** | | **Subject Name** | **L** | | **T** | | **P** | | **Hrs.** | | **Credits** | | |
| 1 | | AM-111 | | Mathematics- I | 4 | | 1 | | 0 | | 5 | | 5 | | |
| 2 | | PH-111 | | Physics-I | 4 | | 0 | | 2 | | 6 | | 5 | | |
| 3 | | CY-111 | | Chemistry-I | 4 | | 0 | | 2 | | 6 | | 5 | | |
| 4 | | HU-111 | | Communication Skills-I | 2 | | 0 | | 0 | | 2 | | 2 | | |
| 5 | | EC-112 | | Electronic Devices | 2 | | 0 | | 2 | | 4 | | 3 | | |
| 6 | | EE-111 | | Fundamental of Electrical Engineering | 3 | | 0 | | 2 | | 5 | | 4 | | |
| 7 | | WS-112 | | Workshop Practice | 0 | | 0 | | 4 | | 4 | | 2 | | |
|  | |  | | Total | 19 | | 1 | | 12 | | 32 | | 26 | | |
| **Semester-II (ICD)** | | | | | | | | | | | | | | | |
| **S.No** | | **Sub Code** | | **Subject Name** | **L** | | **T** | | **P** | | **Hrs.** | | **Credits** | | |
| 1 | | AM-121 | | Mathematics- II | 4 | | 1 | | 0 | | 5 | | 5 | | |
| 2 | | PH-121 | | Physics-II | 4 | | 0 | | 2 | | 6 | | 5 | | |
| 3 | | CY-121 | | Chemistry-II | 4 | | 0 | | 2 | | 6 | | 5 | | |
| 4 | | ME-121 | | Engineering Drawing | 0 | | 0 | | 4 | | 4 | | 2 | | |
| 5 | | EC-121 | | Digital Electronics | 3 | | 0 | | 4 | | 7 | | 5 | | |
| 6 | | EC-122 | | Electronics Workshop Practice-I | 0 | | 0 | | 4 | | 4 | | 2 | | |
|  | |  | | Total | 15 | | 1 | | 16 | | 32 | | 24 | | |
| **Semester-III A (ICD)** | | | | | | | | | | | | | | | |
|  | | TP-201 | | Two Weeks Practical Training during summer vacations |  | |  | |  | | 80 | | S/US | | |
| **Semester-III B (ICD)** | | | | | | | | | | | | | | | |
| **S.No** | | **Sub Code** | | **Subject Name** | **L** | | **T** | | **P** | | **Hrs.** | | **Credits** | | |
| 1 | | CS-216 | | Computer Fundamentals | 3 | | 0 | | 2 | | 5 | | 4 | | |
| 2 | | HU-211 | | Communication Skills-II | 1 | | 0 | | 2 | | 3 | | 2 | | |
| 3 | | EC-212 | | Fundamental of television Engineering | 3 | | 1 | | 2 | | 6 | | 5 | | |
| 4 | | EC-213 | | Electronics measurement & instrumentation | 3 | | 1 | | 2 | | 6 | | 5 | | |
| 5 | | EC-214 | | Analog Communication | 3 | | 1 | | 2 | | 6 | | 5 | | |
| 6 | | EC-216 | | Maintenance & Repairing of Televisions | 0 | | 0 | | 4 | | 4 | | 2 | | |
| 7 | | MC-211 | | Moral values and Professional ethics | 1 | | 0 | | 0 | | 1 | | 0 | | |
|  | |  | | Total | 14 | | 3 | | 14 | | 31 | | 23 | | |
| **Semester-IV (ICD)** | | | | | | | | | | | | | | | |
| **S.No** | | **Sub Code** | | **Subject Name** | **L** | | **T** | | **P** | | **Hrs.** | | **Credits** | | |
| 1 | | AM-221 | | Applied Mathematics | 3 | | 1 | | 0 | | 4 | | 4 | | |
| 2 | | EC-222 | | Audio Video System | 3 | | 0 | | 2 | | 5 | | 4 | | |
| 3 | | EC-223 | | Fundamentals of Microprocessor & Microcontroller | 3 | | 1 | | 4 | | 8 | | 6 | | |
| 4 | | EC-224 | | Troubleshooting of Audio Video equipment | 0 | | 0 | | 6 | | 6 | | 3 | | |
| 5 | | EC-228 | | Network Theory | 3 | | 1 | | 0 | | 4 | | 4 | | |
| 6 | | EC-229 | | Troubleshooting of Electronic Components | 0 | | 0 | | 4 | | 4 | | 2 | | |
|  | |  | | Total | 12 | | 3 | | 16 | | 31 | | 23 | | |
| **Semester-V A (ICD)** | | | | | | | | | | | | | | | |
|  | | TP301 | | Four Weeks Industrial Training during summer vacations |  | |  | |  | | 160 | |  | | |
| **Semester-V B (ICD)** | | | | | | | | | | | | | | | |
| **S.No** | | **Sub Code** | | **Subject Name** | **L** | | **T** | | **P** | | **Hrs.** | | **Credits** | | |
| 1 | | MC-311 | | Environmental Studies | 2 | | 0 | | 0 | | 2 | | 2 | | |
| 2 | | HU-311 | | Entrepreneurship | 2 | | 0 | | 0 | | 2 | | 2 | | |
| 3 | | EC-311 | | Field Theory | 3 | | 0 | | 0 | | 3 | | 3 | | |
| 4 | | EC-312 | | Linear IC's & Application | 3 | | 1 | | 4 | | 8 | | 6 | | |
| 5 | | EC-313 | | Industrial Electronics | 3 | | 1 | | 4 | | 8 | | 6 | | |
| 6 | | EC-314 | | Electronic Workshop Practice-II | 0 | | 0 | | 4 | | 6 | | 4 | | |
| 7 | | EC-315 | | Surface Mount Technology | 2 | | 1 | | 0 | | 3 | | 3 | | |
| 7 | | TP-301E | | Industrial Training |  | |  | |  | |  | | S/US | | |
|  | |  | | Total | 15 | | 3 | | 12 | | 30 | | 24 | | |
| **Semester-VI (ICD)** | | | | | | | | | | | | | | | |
| **S.No** | | **Sub Code** | | **Subject Name** | **L** | | **T** | | **P** | | **Hrs.** | | **Credits** | | |
| 1 | | EC-321 | | Digital Communication | 3 | | 1 | | 2 | | 6 | | 5 | | |
| 2 | | EC-322 | | Wireless & Mobile Communication | 3 | | 0 | | 0 | | 3 | | 3 | | |
| 3 | | EC-323 | | Microprocessor & Microcontroller Applications | 3 | | 1 | | 2 | | 6 | | 5 | | |
| 4 | | EC-324 | | Microwave engineering | 3 | | 0 | | 0 | | 3 | | 3 | | |
| 5 | | EC-325 | | Microelectronics | 3 | | 0 | | 2 | | 5 | | 4 | | |
| 6 | | EC-327 | | Project | 0 | | 0 | | 4 | | 4 | | 2 | | |
|  | |  | | Total | 15 | | 2 | | 10 | | 27 | | 22 | | |

**DIPLOMA IN ELECTRICAL ENGINEERING**

**&**

**CERTIFICATE IN ELECTRICIAN (CEN)**

**(ICD)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester-I** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-111 | Mathematics- I | 4 | 1 | 0 | 5 | 5 |
| 2 | PH-111 | Physics-I | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-111 | Chemistry-I | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-111 | Communication Skills-I | 2 | 0 | 0 | 2 | 2 |
| 5 | EE-113 | Basic Electrical Engineering | 3 | 0 | 2 | 5 | 4 |
| 6 | EE-112 | Electrical Workshop Practice-I | 0 | 0 | 4 | 4 | 2 |
| 7 | ME-111 | Engineering Drawing | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **17** | **1** | **14** | **32** | **25** |
| **Semester-II** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-121 | Mathematics- II | 4 | 1 | 0 | 5 | 5 |
| 2 | PH-121 | Physics-II | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-121 | Chemistry-II | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-121 | Communication Skills-II | 1 | 0 | 2 | 3 | 2 |
| 5 | WS-122 | Workshop Practice | 0 | 0 | 4 | 4 | 2 |
| 6 | CS-121 | Computer Fundamentals | 3 | 0 | 2 | 5 | 4 |
| 7 | EE-121 | Electrical Engineering Drawing | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **16** | **1** | **16** | **33** | **25** |
| **Semester-III A** | | | | | | | |
|  | TP-201 | Two Weeks Practical Training during summer vacations |  |  |  | 80 | S/US |
| **Semester-III B** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | EE-212 | D.C. Machines and Transformers | 3 | 1 | 2 | 6 | 5 |
| 2 | EE-213 | Electrical Measurements | 3 | 0 | 2 | 5 | 4 |
| 3 | EE-214 | Power System 1(Transmission & Distribution) | 3 | 1 | 0 | 4 | 4 |
| 4 | EC-211 | Fundamentals of Electronics Engineering | 3 | 0 | 2 | 5 | 4 |
| 5 | EE-215 | Electrical Estimation & Costing | 3 | 1 | 0 | 4 | 4 |
| 6 | EE-216 | Maintenance & Repair of Electrical Equipments | 2 | 0 | 2 | 4 | 3 |
| 7 | MC-211 | Moral values and Professional Ethics | 1 | 0 | 0 | 1 | 0 |
|  |  | **Total** | **18** | **3** | **8** | **29** | **24** |
| **Semester-IV** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-221 | Applied Mathematics | 3 | 1 | 0 | 4 | 4 |
| 2 | EE-222 | Sensors and Transducers | 3 | 0 | 2 | 5 | 4 |
| 3 | EE-223 | Electrical Workshop Practice-II | 0 | 0 | 4 | 4 | 2 |
| 4 | EE-224 | Testing & Maintenance of Electrical Machines | 0 | 0 | 4 | 4 | 2 |
| 5 | EE-225 | Utilization of Electrical Energy | 3 | 0 | 0 | 3 | 3 |
| 6 | EE-226 | A.C. machines | 3 | 0 | 2 | 5 | 4 |
| 7 | EE-227 | Power System II (Generation) | 3 | 0 | 0 | 3 | 3 |
|  |  | **Total** | **15** | **1** | **12** | **28** | **22** |
| **Semester-V A** | | | | | | | |
|  | TP-301 | Four Weeks Industrial Training during summer vacations |  |  |  | 160 |  |
| **Semester-V B** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | MC-311 | Environmental Studies | 2 | 0 | 0 | 2 | 2 |
| 2 | HU-311 | Entrepreneurship | 2 | 0 | 0 | 2 | 2 |
| 3 | EE-311 | Electrical Circuit Theory | 3 | 1 | 2 | 6 | 5 |
| 4 | EE-312 | Digital Electronics | 3 | 0 | 2 | 5 | 4 |
| 5 | EE-313 | Control Engineering | 3 | 0 | 2 | 5 | 4 |
| 6 | EE-314 | Electrical Engineering Materials | 3 | 0 | 0 | 3 | 3 |
| 7 | EE-315 | Computer Programming | 3 | 0 | 2 | 5 | 4 |
| 8 | TP-301E | Industrial Training (Evaluation only) |  |  |  |  | S/US |
|  |  | **Total** | **19** | **1** | **8** | **28** | **24** |
| **Semester-VI** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | EE-321 | Microprocessors | 2 | 0 | 0 | 2 | 2 |
| 2 | EE-322 | Industrial Electronics | 3 | 0 | 2 | 5 | 4 |
| 3 | EE-323 | Energy Conservation Practice | 3 | 0 | 0 | 3 | 3 |
| 4 | EE-324 | Switchgear and Protection | 3 | 0 | 2 | 5 | 4 |
| 5 | EE-325 | Industrial Automation | 3 | 0 | 2 | 5 | 4 |
| 6 | EE-326 | Non-Conventional Energy Sources | 3 | 0 | 0 | 3 | 3 |
| 7 | EE-327 | Project | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **17** | **0** | **10** | **27** | **22** |

**DIPLOMA (ICD) IN INSTRUMENTATION AND CONTROL ENGINEERING**

**&**

**CERTIFICATE IN SERVICING & MAINTENANCE OF MEDICAL INSTRUMENTS (CSMM)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester-I** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-111 | Mathematics- I | 4 | 1 | 0 | 5 | 5 |
| 2 | PH-111 | Physics-I | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-111 | Chemistry-I | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-111 | Communication Skills-I | 2 | 0 | 0 | 2 | 2 |
| 5 | IE-111 | Instrumentation Workshop Practice | 0 | 0 | 2 | 2 | 1 |
| 6 | EE-113 | Basic Electrical Engineering | 3 | 0 | 2 | 5 | 4 |
| 7 | ME-111 | Engineering Drawing | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **17** | **1** | **12** | **30** | **24** |
| **Semester-II** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-121 | Mathematics- II | 4 | 1 | 0 | 5 | 5 |
| 2 | PH-121 | Physics-II | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-121 | Chemistry-II | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-121 | Communication Skills-II | 1 | 0 | 2 | 3 | 2 |
| 5 | WS-122 | Workshop Practice | 0 | 0 | 4 | 4 | 2 |
| 6 | CS-121 | Computer Fundamentals | 3 | 0 | 2 | 5 | 4 |
| 7 | IE-121 | Measurement Science | 3 | 0 | 0 | 3 | 3 |
|  |  | **Total** | **19** | **1** | **12** | **32** | **26** |
| **Semester-III A** | | | | | | | |
|  | TP-201 | Two Weeks Practical Training during summer vacations |  |  |  | 80 | S/US |
| **Semester-III B** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | IE-211 | Electrical Measurements | 3 | 0 | 2 | 5 | 4 |
| 2 | IE-212 | Sensors and Transducers | 3 | 0 | 2 | 5 | 4 |
| 3 | IE-213 | Hydraulic and Pneumatic Instruments | 3 | 0 | 2 | 5 | 4 |
| 4 | IE-214 | Electrical and Instrumentation Drawing | 0 | 0 | 4 | 4 | 2 |
| 5 | IE-215 | Electromagnetic Energy Conversion | 3 | 0 | 2 | 5 | 4 |
| 6 | EC-211 | Fundamental of Electronics Engineering | 3 | 0 | 2 | 5 | 4 |
| 7 | MC-211 | Moral values and Professional ethics | 1 | 0 | 0 | 1 | 0 |
|  |  | **Total** | **16** | **0** | **14** | **30** | **22** |
| **Semester-IV** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-221 | Applied Mathematics | 3 | 1 | 0 | 4 | 4 |
| 2 | IE-221 | Human Physiology and Medical Instruments | 3 | 0 | 0 | 3 | 3 |
| 3 | IE-222 | Maintenance and Troubleshooting of Instruments | 0 | 0 | 3 | 3 | 1 |
| 4 | IE-223 | Process Control | 3 | 0 | 2 | 5 | 4 |
| 5 | IE-224 | Analog and Digital Electronics | 3 | 0 | 4 | 7 | 5 |
| 6 | IE-225 | Mechanical Measurements-I | 3 | 0 | 0 | 3 | 3 |
| 7 | IE-226 | Electronic Measurements | 3 | 0 | 2 | 5 | 4 |
|  |  | **Total** | **18** | **1** | **11** | **30** | **24** |
| **Semester-V A** | | | | | | | |
|  | TP-301 | Four Weeks Industrial Training during summer vacations |  |  |  | 160 |  |
| **Semester-V B** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | MC-311 | Environmental Studies | 2 | 0 | 0 | 2 | 2 |
| 2 | HU311 | Entrepreneurship | 2 | 0 | 0 | 2 | 2 |
| 3 | IE-311 | Control Engineering | 3 | 0 | 2 | 5 | 4 |
| 4 | IE-312 | Analytical & Biomedical Instrumentation | 3 | 0 | 2 | 5 | 4 |
| 5 | IE-313 | Data Acquisition Systems | 3 | 0 | 2 | 5 | 4 |
| 6 | IE-314 | Mechanical Measurements-II | 3 | 0 | 2 | 5 | 4 |
| 7 | IE-315 | Microprocessor and Microcontroller | 3 | 0 | 2 | 5 | 4 |
| 8 | TP-301E | Industrial Training (Evaluation only) |  |  |  |  | S/US |
|  |  | **Total** | **19** | **0** | **10** | **29** | **24** |
| **Semester-VI (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | IE-321 | Elements of Computer Programming | 2 | 0 | 2 | 4 | 3 |
| 2 | IE-322 | Case Studies of Process Plants | 3 | 0 | 2 | 5 | 4 |
| 3 | ME-326 | Fundamental of Mechanical Engineering | 3 | 0 | 0 | 3 | 3 |
| 4 | IE-323 | Industrial Automation and Safety | 3 | 0 | 2 | 5 | 4 |
| 5 | IE-324 | Power Electronics and Drives | 3 | 0 | 2 | 5 | 4 |
| 6 | IE-325 | Telemetry and Display Devices | 2 | 0 | 0 | 2 | 2 |
| 7 | IE-326 | Project | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **16** | **0** | **12** | **28** | **22** |

**DIPLOMA (ICD) IN FOOD TECHNOLOGY**

**&**

**CERTIFICATE IN FOOD PROCESSING & PRESERVATION (CPF)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester-I (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-111 | Mathematics- I | 4 | 1 | 0 | 5 | 5 |
| 2 | PH-111 | Physics-I | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-111 | Chemistry-I | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-111 | Communication Skills-I | 2 | 0 | 0 | 2 | 2 |
| 5 | WS-111 | Workshop Practice-I | 0 | 0 | 4 | 4 | 2 |
| 6 | ME-111 | Engineering Drawing | 0 | 0 | 4 | 4 | 2 |
| 7 | FT -111 | Introduction to Food Technology | 3 | 0 | 2 | 5 | 4 |
|  |  | **Total** | **17** | **1** | **14** | **32** | **25** |
| **Semester-II (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-121 | Mathematics- II | 4 | 1 | 0 | 5 | 5 |
| 2 | PH-121 | Physics-II | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-121 | Chemistry-II | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-121 | Communication Skills-II | 1 | 0 | 2 | 3 | 2 |
| 5 | WS-121 | Workshop Practice-II | 0 | 0 | 4 | 4 | 2 |
| 6 | CS-121 | Computer Fundamentals | 3 | 0 | 2 | 5 | 4 |
|  |  | **Total** | **16** | **1** | **12** | **29** | **23** |
| **Semester-III A (ICD)** | | | | | | | |
|  | TP-201 | Two Weeks Practical Training during summer vacations |  |  |  | 80 | S/US |
| **Semester-III B (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-211 | Applied Mathematics | 3 | 1 | 0 | 4 | 4 |
| 2 | EE-211 | Fundamental of Electrical Engineering | 3 | 0 | 2 | 5 | 4 |
| 3 | EC-211 | Fundamentals of Electronics Engineering | 3 | 0 | 2 | 5 | 4 |
| 4 | FT -211 | Food Microbiology | 3 | 0 | 2 | 5 | 4 |
| 5 | FT -212 | Food Chemistry | 3 | 0 | 2 | 5 | 4 |
| 6 | FT -213 | Principles of Food Processing and Preservation | 3 | 0 | 2 | 5 | 4 |
|  |  | **Total** | **18** | **1** | **10** | **29** | **24** |
| **Semester-IV (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | FT-221 | Technology of Food Beverages | 3 | 0 | 2 | 5 | 4 |
| 2 | FT-222 | Technology of Fruits and Vegetable Processing | 3 | 0 | 2 | 5 | 4 |
| 3 | FT-223 | Technology of Milk and Milk Processing | 3 | 0 | 2 | 5 | 4 |
| 4 | FT-224 | Technology of Meat, Fish and Poultry Processing | 3 | 0 | 2 | 5 | 4 |
| 5 | FT-225 | Technology of Cereal Processing | 3 | 0 | 2 | 5 | 4 |
| 6 | FT-226 | Food Quality | 3 | 0 | 2 | 5 | 4 |
| 7 | MC-221 | Moral values and Professional ethics | 1 | 0 | 0 | 1 | 0 |
|  |  | **Total** | **19** | **0** | **12** | **31** | **24** |
| **Semester-V A (ICD)** | | | | | | | |
|  | TP-301 | Four Weeks Industrial Training during summer vacations |  |  |  | 160 |  |
| **Semester-V B** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | FT-311 | Food Laws and Quality Assurance | 3 | 0 | 2 | 5 | 4 |
| 2 | FT-312 | Unit operations in Food Processing | 3 | 0 | 2 | 5 | 4 |
| 3 | FT-313 | Post Harvest Technology | 3 | 0 | 2 | 5 | 4 |
| 4 | FT-314 | Food Biochemistry and Nutrition | 3 | 0 | 2 | 5 | 4 |
| 5 | FT-315 | Technology of Bakery and Confectionery | 3 | 0 | 2 | 5 | 4 |
| 6 | FT-316 | Technology of Pulses and Oilseed Processing | 3 | 0 | 2 | 5 | 4 |
| 7 | TP-301E | Industrial Training (Evaluation only--SUS) |  |  |  |  | S/US |
|  |  | **Total** | **18** | **0** | **12** | **30** | **24** |
| **Semester-VI** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | HU-321 | Entrepreneurship | 2 | 0 | 0 | 2 | 2 |
| 2 | MC-321 | Environmental Studies | 2 | 0 | 0 | 2 | 2 |
| 3 | FT-321 | Elements of Food Engineering | 3 | 0 | 2 | 5 | 4 |
| 4 | FT-322 | Technology of Spices, Herbs and Condiments | 3 | 0 | 2 | 5 | 4 |
| 5 | FT-323 | Food Byproducts and Waste Utilization | 3 | 0 | 2 | 5 | 4 |
| 6 | FT-324 | Technology of Food Packaging | 3 | 0 | 2 | 5 | 4 |
| 7 | FT-325 | Project (SUS) |  |  | 4 | 4 | 2 |
|  |  | **Total** | **16** | **0** | **12** | **28** | **22** |

**DIPLOMA(ICD) IN MECHANICAL ENGINEERING**

**&**

**CERTIFICATE IN AIR CONDITIONING MECHANIC (CAC)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester-I (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-111 | Mathematics- I | 4 | 1 | 0 | 5 | 5 |
| 2 | PH -111 | Physics-I | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-111 | Chemistry-I | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-111 | Communication Skills-I | 2 | 0 | 0 | 2 | 2 |
| 5 | WS-111 | Workshop Practice-I | 0 | 0 | 4 | 4 | 2 |
| 6 | ME-111 | Engineering Drawing | 0 | 0 | 4 | 4 | 2 |
| 7 | CS-111 | Computer Fundamentals | 3 | 0 | 2 | 5 | 4 |
|  |  | **Total** | **17** | **1** | **14** | **32** | **25** |
| **Semester-II (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-121 | Mathematics- II | 4 | 1 | 0 | 5 | 5 |
| 2 | PH-121 | Physics-II | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-121 | Chemistry-II | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-121 | Communication Skills-II | 1 | 0 | 2 | 3 | 2 |
| 5 | WS-121 | Workshop Practice-II | 0 | 0 | 4 | 4 | 2 |
| 6 | ME-122 | Machine Drawing | 0 | 0 | 4 | 4 | 2 |
| 7 | ME-123 | Thermal Engineering | 2 | 0 | 2 | 4 | 3 |
|  |  | **Total** | **15** | **1** | **16** | **32** | **24** |
| **Semester-III A (ICD)** | | | | | | | |
|  | TP-201 | Two Weeks Practical Training during summer vacations |  |  |  | 80 | S/US |
| **Semester-III B (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-211 | Applied Mathematics | 3 | 1 | 0 | 4 | 4 |
| 2 | EE-211 | Fundamental of Electrical Engineering | 3 | 0 | 2 | 5 | 4 |
| 3 | EC-211 | Fundamentals of Electronics Engineering | 3 | 0 | 2 | 5 | 4 |
| 4 | ME-211 | Manufacturing Process-I | 3 | 0 | 2 | 5 | 4 |
| 5 | ME-212 B | Refrigeration & Air Conditioning-I | 2 | 0 | 2 | 4 | 3 |
| 6 | ME-213 | Engineering Materials & Metallurgy | 2 | 0 | 2 | 4 | 3 |
| 7 | ME-214 B | Installation & Servicing of RAC equipments | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **16** | **1** | **14** | **31** | **24** |
| **Semester-IV (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | ME-221 B | Refrigeration & Air Conditioning-II | 3 | 0 | 2 | 5 | 4 |
| 2 | ME-222 B | Fundamentals of Heat and Mass Transfer | 2 | 0 | 4 | 6 | 4 |
| 3 | ME-223 | Metrology & Mechanical Measurements | 3 | 0 | 2 | 5 | 4 |
| 4 | ME-224 | Estimation & Costing | 2 | 0 | 0 | 2 | 2 |
| 5 | ME-225 | Manufacturing Process-II | 3 | 0 | 2 | 5 | 4 |
| 6 | ME-226 | Engineering Mechanics | 3 | 1 | 2 | 6 | 5 |
| 7 | MC-221 | Moral values and Professional ethics | 1 | 0 | 0 | 1 | 0 |
|  |  | **Total** | **17** | **1** | **12** | **30** | **23** |
| **Semester-V A (ICD)** | | | | | | | |
|  | TP-301 | Four Weeks Industrial Training during summer vacations |  |  |  | 160 |  |
| **Semester-VB (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | ME-311 | Power Plant Engineering | 3 | 0 | 2 | 5 | 4 |
| 2 | ME-312 | Theory of Machines | 2 | 1 | 4 | 7 | 5 |
| 3 | ME-313 | Fluid Mechanics | 2 | 0 | 4 | 6 | 4 |
| 4 | ME-314 | Production Management | 2 | 0 | 2 | 4 | 3 |
| 5 | ME-315 | Strength of Materials | 2 | 1 | 2 | 5 | 4 |
| 6 | ME-316 | Industrial Engineering | 2 | 0 | 2 | 4 | 3 |
| 7 | TP-301E | Industrial Training (Evaluation only--S/US) |  |  |  |  | S/US |
|  |  | **Total** | **13** | **2** | **16** | **31** | **23** |
| **Semester-VI (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | HU-321 | Entrepreneurship | 2 | 0 | 0 | 2 | 2 |
| 2 | MC-321 | Environmental Studies | 2 | 0 | 0 | 2 | 2 |
| 3 | ME-321 | Automobile & IC Engine | 2 | 0 | 4 | 6 | 4 |
| 4 | ME-322 | CAD/CAM | 2 | 0 | 4 | 6 | 4 |
| 5 | ME-323 | Design of Machine Elements | 3 | 2 | 0 | 5 | 5 |
| 6 | ME-324 | Industrial Automation & Control | 2 | 0 | 4 | 6 | 4 |
| 7 | ME-325 | Project | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **13** | **2** | **16** | **31** | **23** |

**DIPLOMA (ICD) IN MECHANICAL ENGINEERING**

**&**

**CERTIFICATE IN AUTO AND FARM EQUIPMENT MECHANIC (CAF)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester-I (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-111 | Mathematics- I | 4 | 1 | 0 | 5 | 5 |
| 2 | PH -111 | Physics-I | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-111 | Chemistry-I | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-111 | Communication Skills-I | 2 | 0 | 0 | 2 | 2 |
| 5 | WS-111 | Workshop Practice-I | 0 | 0 | 4 | 4 | 2 |
| 6 | ME-111 | Engineering Drawing | 0 | 0 | 4 | 4 | 2 |
| 7 | CS-111 | Computer Fundamentals | 3 | 0 | 2 | 5 | 4 |
|  |  | **Total** | **17** | **1** | **14** | **32** | **25** |
| **Semester-II (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-121 | Mathematics- II | 4 | 1 | 0 | 5 | 5 |
| 2 | PH-121 | Physics-II | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-121 | Chemistry-II | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-121 | Communication Skills-II | 1 | 0 | 2 | 3 | 2 |
| 5 | WS-121 | Workshop Practice-II | 0 | 0 | 4 | 4 | 2 |
| 6 | ME-122 | Machine Drawing | 0 | 0 | 4 | 4 | 2 |
| 7 | ME-123 | Thermal Engineering | 2 | 0 | 2 | 4 | 3 |
|  |  | **Total** | **15** | **1** | **16** | **32** | **24** |
| **Semester-III A (ICD)** | | | | | | | |
|  | TP-201 | Two Weeks Practical Training during summer vacations |  |  |  | 80 | S/US |
| **Semester-III B (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-211 | Applied Mathematics | 3 | 1 | 0 | 4 | 4 |
| 2 | EE-211 | Fundamental of Electrical Engineering | 3 | 0 | 2 | 5 | 4 |
| 3 | EC-211 | Fundamentals of Electronics Engineering | 3 | 0 | 2 | 5 | 4 |
| 4 | ME-211 | Manufacturing Process-I | 3 | 0 | 2 | 5 | 4 |
| 5 | ME-212 C | Farm Machinery-I | 2 | 0 | 2 | 4 | 3 |
| 6 | ME-213 | Engineering Materials & Metallurgy | 2 | 0 | 2 | 4 | 3 |
| 7 | ME-214 C | Repair and Maintenance of Auto and Farm Equipments | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **16** | **1** | **14** | **31** | **24** |
| **Semester-IV (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | ME-221 C | Advanced Agricultural Equipments | 3 | 0 | 2 | 5 | 4 |
| 2 | ME-222 C | Farm machinery-II | 2 | 0 | 4 | 6 | 4 |
| 3 | ME-223 | Metrology & Mechanical Measurements | 3 | 0 | 2 | 5 | 4 |
| 4 | ME-224 | Estimation & Costing | 2 | 0 | 0 | 2 | 2 |
| 5 | ME-225 | Manufacturing Process-II | 3 | 0 | 2 | 5 | 4 |
| 6 | ME-226 | Engineering Mechanics | 3 | 1 | 2 | 6 | 5 |
| 7 | MC-221 | Moral values and Professional ethics | 1 | 0 | 0 | 1 | 0 |
|  |  | **Total** | **17** | **1** | **12** | **30** | **23** |
| **Semester-V A (ICD)** | | | | | | | |
|  | TP-301 | Four Weeks Industrial Training during summer vacations |  |  |  | 160 |  |
| **Semester-V B (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | ME-311 | Power Plant Engineering | 3 | 0 | 2 | 5 | 4 |
| 2 | ME-312 | Theory of Machines | 2 | 1 | 4 | 7 | 5 |
| 3 | ME-313 | Fluid Mechanics | 2 | 0 | 4 | 6 | 4 |
| 4 | ME-314 | Production Management | 2 | 0 | 2 | 4 | 3 |
| 5 | ME-315 | Strength of Materials | 2 | 1 | 2 | 5 | 4 |
| 6 | ME-316 | Industrial Engineering | 2 | 0 | 2 | 4 | 3 |
| 7 | TP-301E | Industrial Training (Evaluation only--S/US) |  |  |  |  | S/US |
|  |  | **Total** | **13** | **2** | **16** | **31** | **23** |
| **Semester-VI (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | HU-321 | Entrepreneurship | 2 | 0 | 0 | 2 | 2 |
| 2 | MC-321 | Environmental Studies | 2 | 0 | 0 | 2 | 2 |
| 3 | ME-321 | Automobile & IC Engine | 2 | 0 | 4 | 6 | 4 |
| 4 | ME-322 | CAD/CAM | 2 | 0 | 4 | 6 | 4 |
| 5 | ME-323 | Design of Machine Elements | 3 | 2 | 0 | 5 | 5 |
| 6 | ME-324 | Industrial Automation & Control | 2 | 0 | 4 | 6 | 4 |
| 7 | ME-325 | Project | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **13** | **2** | **16** | **31** | **23** |

**DIPLOMA (ICD) IN MECHANICAL ENGINEERING**

**&**

**CERTIFICATE IN FOUNDRY AND FORGING (CFF)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester-I (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-111 | Mathematics- I | 4 | 1 | 0 | 5 | 5 |
| 2 | PH -111 | Physics-I | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-111 | Chemistry-I | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-111 | Communication Skills-I | 2 | 0 | 0 | 2 | 2 |
| 5 | WS-111 | Workshop Practice-I | 0 | 0 | 4 | 4 | 2 |
| 6 | ME-111 | Engineering Drawing | 0 | 0 | 4 | 4 | 2 |
| 7 | CS-111 | Computer Fundamentals | 3 | 0 | 2 | 5 | 4 |
|  |  | **Total** | **17** | **1** | **14** | **32** | **25** |
| **Semester-II (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-121 | Mathematics- II | 4 | 1 | 0 | 5 | 5 |
| 2 | PH-121 | Physics-II | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-121 | Chemistry-II | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-121 | Communication Skills-II | 1 | 0 | 2 | 3 | 2 |
| 5 | WS-121 | Workshop Practice-II | 0 | 0 | 4 | 4 | 2 |
| 6 | ME-122 | Machine Drawing | 0 | 0 | 4 | 4 | 2 |
| 7 | ME-123 | Thermal Engineering | 2 | 0 | 2 | 4 | 3 |
|  |  | **Total** | **15** | **1** | **16** | **32** | **24** |
| **Semester-III A (ICD)** | | | | | | | |
|  | TP-201 | Two Weeks Practical Training during summer vacations |  |  |  | 80 | S/US |
| **Semester-III B (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-211 | Applied Mathematics | 3 | 1 | 0 | 4 | 4 |
| 2 | EE-211 | Fundamental of Electrical Engineering | 3 | 0 | 2 | 5 | 4 |
| 3 | EC-211 | Fundamentals of Electronics Engineering | 3 | 0 | 2 | 5 | 4 |
| 4 | ME-211 | Manufacturing Process-I | 3 | 0 | 2 | 5 | 4 |
| 5 | ME-212 E | Foundry Technology-I | 2 | 0 | 2 | 4 | 3 |
| 6 | ME-213 | Engineering Materials & Metallurgy | 2 | 0 | 2 | 4 | 3 |
| 7 | ME-214 E | Pattern Drawing | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **16** | **1** | **14** | **31** | **24** |
| **Semester-IV (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | ME-221 E | Foundry Technology-II | 3 | 0 | 2 | 5 | 4 |
| 2 | ME-222 E | Forging Technology | 2 | 0 | 4 | 6 | 4 |
| 3 | ME-223 | Metrology & Mechanical Measurements | 3 | 0 | 2 | 5 | 4 |
| 4 | ME-224 | Estimation & Costing | 2 | 0 | 0 | 2 | 2 |
| 5 | ME-225 | Manufacturing Process-II | 3 | 0 | 2 | 5 | 4 |
| 6 | ME-226 | Engineering Mechanics | 3 | 1 | 2 | 6 | 5 |
| 7 | MC-221 | Moral values and Professional ethics | 1 | 0 | 0 | 1 | 0 |
|  |  | **Total** | **17** | **1** | **12** | **30** | **23** |
| **Semester-V A (ICD)** | | | | | | | |
|  | TP-301 | Four Weeks Industrial Training during summer vacations |  |  |  | 160 |  |
| **Semester-V B (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | ME-311 | Power Plant Engineering | 3 | 0 | 2 | 5 | 4 |
| 2 | ME-312 | Theory of Machines | 2 | 1 | 4 | 7 | 5 |
| 3 | ME-313 | Fluid Mechanics | 2 | 0 | 4 | 6 | 4 |
| 4 | ME-314 | Production Management | 2 | 0 | 2 | 4 | 3 |
| 5 | ME-315 | Strength of Materials | 2 | 1 | 2 | 5 | 4 |
| 6 | ME-316 | Industrial Engineering | 2 | 0 | 2 | 4 | 3 |
| 7 | TP-301E | Industrial Training (Evaluation only--S/US) |  |  |  |  | S/US |
|  |  | **Total** | **13** | **2** | **16** | **31** | **23** |
| **Semester-VI (ICD)** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | HU-321 | Entrepreneurship | 2 | 0 | 0 | 2 | 2 |
| 2 | MC-321 | Environmental Studies | 2 | 0 | 0 | 2 | 2 |
| 3 | ME-321 | Automobile & IC Engine | 2 | 0 | 4 | 6 | 4 |
| 4 | ME-322 | CAD/CAM | 2 | 0 | 4 | 6 | 4 |
| 5 | ME-323 | Design of Machine Elements | 3 | 2 | 0 | 5 | 5 |
| 6 | ME-324 | Industrial Automation & Control | 2 | 0 | 4 | 6 | 4 |
| 7 | ME-325 | Project | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **13** | **2** | **16** | **31** | **23** |

**DIPLOMA (ICD) IN MECHANICAL ENGINEERING**

**&**

**CERTIFICATE IN TOOL AND DIE TECHNOLOGY (CTD)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester-I** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-111 | Mathematics- I | 4 | 1 | 0 | 5 | 5 |
| 2 | PH-111 | Physics-I | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-111 | Chemistry-I | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-111 | Communication Skills-I | 2 | 0 | 0 | 2 | 2 |
| 5 | WS-111 | Workshop Practice-I | 0 | 0 | 4 | 4 | 2 |
| 6 | ME-111 | Engineering Drawing | 0 | 0 | 4 | 4 | 2 |
| 7 | CS-111 | Computer Fundamentals | 3 | 0 | 2 | 5 | 4 |
|  |  | **Total** | **17** | **1** | **14** | **32** | **25** |
| **Semester-II** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-121 | Mathematics- II | 4 | 1 | 0 | 5 | 5 |
| 2 | PH-121 | Physics-II | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-121 | Chemistry-II | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-121 | Communication Skills-II | 1 | 0 | 2 | 3 | 2 |
| 5 | WS-121 | Workshop Practice-II | 0 | 0 | 4 | 4 | 2 |
| 6 | ME-121 | Machine Drawing | 0 | 0 | 4 | 4 | 2 |
| 7 | ME-122 | Thermal Engineering | 2 | 0 | 2 | 4 | 3 |
|  |  | **Total** | **15** | **1** | **16** | **32** | **24** |
| **Semester-III A** | | | | | | | |
|  | TP-201 | Two Weeks Practical Training during summer vacations |  |  |  | 80 | S/US |
| **Semester-III B** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-211 | Applied Mathematics | 3 | 1 | 0 | 4 | 4 |
| 2 | EE-211 | Fundamental of Electrical Engineering | 3 | 0 | 2 | 5 | 4 |
| 3 | EC-211 | Fundamentals of Electronics Engineering | 3 | 0 | 2 | 5 | 4 |
| 4 | ME-211 | Manufacturing Process-I | 3 | 0 | 2 | 5 | 4 |
| 5 | ME-212 A | Tool Room Techniques-I | 2 | 0 | 2 | 4 | 3 |
| 6 | ME-213 | Engineering Materials & Metallurgy | 2 | 0 | 2 | 4 | 3 |
| 7 | ME-214 A | Tool Drawing | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **16** | **1** | **14** | **31** | **24** |
| **Semester-IV** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | ME-221 A | Fundamentals of Tool and Die Design | 3 | 0 | 2 | 5 | 4 |
| 2 | ME-222 A | Tool Room Techniques-II | 2 | 0 | 4 | 6 | 4 |
| 3 | ME-223 | Metrology & Mechanical Measurement | 3 | 0 | 2 | 5 | 4 |
| 4 | ME-224 | Estimation & Costing | 2 | 0 | 0 | 2 | 2 |
| 5 | ME-225 | Manufacturing Process-II | 3 | 0 | 2 | 5 | 4 |
| 6 | ME-226 | Engineering Mechanics | 3 | 1 | 2 | 6 | 5 |
| 7 | MC-221 | Moral values and Professional ethics | 1 | 0 | 0 | 1 | 0 |
|  |  | **Total** | **17** | **1** | **12** | **30** | **23** |
| **Semester-V A** | | | | | | | |
|  | TP-301 | Four Weeks Industrial Training during summer vacations |  |  |  | 160 |  |
| **Semester-V B** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | ME-311 | Power Plant Engineering | 3 | 0 | 2 | 5 | 4 |
| 2 | ME-312 | Theory of Machines | 2 | 1 | 4 | 7 | 5 |
| 3 | ME-313 | Fluid Mechanics | 2 | 0 | 4 | 6 | 4 |
| 4 | ME-314 | Production Management | 2 | 0 | 2 | 4 | 3 |
| 5 | ME-315 | Strength of Materials | 2 | 1 | 2 | 5 | 4 |
| 6 | ME-316 | Industrial Engineering | 2 | 0 | 2 | 4 | 3 |
| 7 | TP-301E | Industrial Training (Evaluation only--S/US) |  |  |  |  | S/US |
|  |  | **Total** | **13** | **2** | **16** | **31** | **23** |
| **Semester-VI** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | HU-321 | Entrepreneurship | 2 | 0 | 0 | 2 | 2 |
| 2 | MC-321 | Environmental Studies | 2 | 0 | 0 | 2 | 2 |
| 3 | ME-321 | Automobile & IC Engine | 2 | 0 | 4 | 6 | 4 |
| 4 | ME-322 | CAD/CAM | 2 | 0 | 4 | 6 | 4 |
| 5 | ME-323 | Design of Machine Elements | 3 | 2 | 0 | 5 | 5 |
| 6 | ME-324 | Industrial Automation & Control | 2 | 0 | 4 | 6 | 4 |
| 7 | ME-325 | Project | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **13** | **2** | **16** | **31** | **23** |

**DIPLOMA (ICD) IN MECHANICAL ENGINEERING**

**&**

**CERTIFICATE IN WELDING (CWG)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester-I** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-111 | Mathematics- I | 4 | 1 | 0 | 5 | 5 |
| 2 | PH -111 | Physics-I | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-111 | Chemistry-I | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-111 | Communication Skills-I | 2 | 0 | 0 | 2 | 2 |
| 5 | WS-111 | Workshop Practice-I | 0 | 0 | 4 | 4 | 2 |
| 6 | ME-111 | Engineering Drawing | 0 | 0 | 4 | 4 | 2 |
| 7 | CS-111 | Computer Fundamentals | 3 | 0 | 2 | 5 | 4 |
|  |  | **Total** | **17** | **1** | **14** | **32** | **25** |
| **Semester-II** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-121 | Mathematics- II | 4 | 1 | 0 | 5 | 5 |
| 2 | PH-121 | Physics-II | 4 | 0 | 2 | 6 | 5 |
| 3 | CY-121 | Chemistry-II | 4 | 0 | 2 | 6 | 5 |
| 4 | HU-121 | Communication Skills-II | 1 | 0 | 2 | 3 | 2 |
| 5 | WS-121 | Workshop Practice-II | 0 | 0 | 4 | 4 | 2 |
| 6 | ME-122 | Machine Drawing | 0 | 0 | 4 | 4 | 2 |
| 7 | ME-123 | Thermal Engineering | 2 | 0 | 2 | 4 | 3 |
|  |  | **Total** | **15** | **1** | **16** | **32** | **24** |
| **Semester-III A** | | | | | | | |
|  | TP-201 | Two Weeks Practical Training during summer vacations |  |  |  | 80 | S/US |
| **Semester-III B** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | AM-211 | Applied Mathematics | 3 | 1 | 0 | 4 | 4 |
| 2 | EE-211 | Fundamental of Electrical Engineering | 3 | 0 | 2 | 5 | 4 |
| 3 | EC-211 | Fundamentals of Electronics Engineering | 3 | 0 | 2 | 5 | 4 |
| 4 | ME-211 | Manufacturing Processes-I | 3 | 0 | 2 | 5 | 4 |
| 5 | ME-212 D | Welding Technology-I | 2 | 0 | 2 | 4 | 3 |
| 6 | ME-213 | Engineering Materials & Metallurgy | 2 | 0 | 2 | 4 | 3 |
| 7 | ME-214 D | Welding Practices | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **16** | **1** | **14** | **31** | **24** |
| **Semester-IV** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | ME-221 D | Inspection and Testing of weldments | 3 | 0 | 2 | 5 | 4 |
| 2 | ME-222 D | Welding Technology-II | 2 | 0 | 4 | 6 | 4 |
| 3 | ME-223 | Metrology & Mechanical Measurements | 3 | 0 | 2 | 5 | 4 |
| 4 | ME-224 | Estimation & Costing | 2 | 0 | 0 | 2 | 2 |
| 5 | ME-225 | Manufacturing Process-II | 3 | 0 | 2 | 5 | 4 |
| 6 | ME-226 | Engineering Mechanics | 3 | 1 | 2 | 6 | 5 |
| 7 | MC-221 | Moral values and Professional ethics | 1 | 0 | 0 | 1 | 0 |
|  |  | **Total** | **17** | **1** | **12** | **30** | **23** |
| **Semester-V A** | | | | | | | |
|  | TP-301 | Four Weeks Industrial Training during summer vacations |  |  |  | 160 |  |
| **Semester-V B** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | ME-311 | Power Plant Engineering | 3 | 0 | 2 | 5 | 4 |
| 2 | ME-312 | Theory of Machines | 2 | 1 | 4 | 7 | 5 |
| 3 | ME-313 | Fluid Mechanics | 2 | 0 | 4 | 6 | 4 |
| 4 | ME-314 | Production Management | 2 | 0 | 2 | 4 | 3 |
| 5 | ME-315 | Strength of Materials | 2 | 1 | 2 | 5 | 4 |
| 6 | ME-316 | Industrial Engineering | 2 | 0 | 2 | 4 | 3 |
| 7 | TP-301E | Industrial Training (Evaluation only--S/US) |  |  |  |  | S/US |
|  |  | **Total** | **13** | **2** | **16** | **31** | **23** |
| **Semester-VI** | | | | | | | |
| **S.No** | **Sub Code** | **Subject Name** | **L** | **T** | **P** | **Hrs.** | **Credits** |
| 1 | HU-321 | Entrepreneurship | 2 | 0 | 0 | 2 | 2 |
| 2 | MC-321 | Environmental Studies | 2 | 0 | 0 | 2 | 2 |
| 3 | ME-321 | Automobile & IC Engines | 2 | 0 | 4 | 6 | 4 |
| 4 | ME-322 | CAD/CAM | 2 | 0 | 4 | 6 | 4 |
| 5 | ME-323 | Design of Machine Elements | 3 | 2 | 0 | 5 | 5 |
| 6 | ME-324 | Industrial Automation & Control | 2 | 0 | 4 | 6 | 4 |
| 7 | ME-325 | Project | 0 | 0 | 4 | 4 | 2 |
|  |  | **Total** | **13** | **2** | **16** | **31** | **23** |